# 10. 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS INFORMATION Premarket Notification [510(K)] Summary

(per 21 CFR 807.92)

**Company Name** 

Medivance, Inc.

500 S. Arthur Avenue, Suite 100 Louisville, Colorado 80027

Contact Person:

Lynne Aronson

Regulatory Affairs and Quality Assurance Manager

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**Device Name** 

Trade/Proprietary Name:

Arctic Sun™ Temperature Management System, Model 200 Control Unit and

Energy Transfer Pads™

Common/Usual Name:

Hypo/Hyperthermia System

Classification Name:

System, Thermal Regulating (per 21 CFR 870.5900)

#### **Predicate Devices**

The Arctic Sun<sup>™</sup> Temperature Management System, Model 200, is substantially equivalent to the following predicate devices:

Arctic Sun Temperature Management System – Model 100 Medivance, Inc. K002577

MediTherm II Series 5900 Hyper/Hypothermia System Gaymar Industries K912051

Blanketrol II Hyper/Hypothermia System

Cincinnati Sub Zero K811742

#### Intended use of the device

The Arctic Sun Temperature Management System Model 200 is a thermal regulating system, indicated for monitoring and controlling patient temperature.

Clinical applications of this device include any condition where patient temperature control within a range covering mild hypothermia to normothermia is required. This would include, but not be limited to, medical, surgical, febrile, accidental hypothermia, or heat stroke patients.

#### **Description of the Device**

The Arctic Sun Temperature Management System is a device used to monitor and control patient temperature. It consists of single-use heat transfer pads, which are adhered to areas of the patient's skin, and a control module that circulates temperature-controlled water. The control module is connected to the pads by flexible tubing. A commercially available temperature probe connected to the control module senses the patient's core temperature. The system can control the patient's core temperature by altering the temperature of the circulating water.

Summary of the technological characteristics of the device compared to the predicate device.

The Arctic Sun Temperature Management System Model 200 and the above referenced predicate device, the Arctic Sun Temperature Management System Model 100, are thermal regulating systems as defined in

21 CFR 870.5900. These external systems consist of a device that is placed in contact with the patient and a temperature controller for the device. These devices utilize pads in contact with the patient. In these devices, the microprocessor-based temperature controllers circulate water through the pads to regulate the patient's temperature. Patient temperature is monitored by YSI 400 series temperature probe.

**Testing** 

Testing of the Arctic Sun Temperature Management System, Model 200 Control Unit, included electrical safety testing in accordance with IEC601/EN60601 and functional safety and performance testing.

### **Conclusions**

Based upon the testing and comparison to the predicate device, the Arctic Sun Temperature Management System, consisting of the modified Arctic Sun<sup>TM</sup> Model 200 Control Unit, performs as intended and raises no new safety or effectiveness issues.



MAR - 7 2001

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Medivance<sup>TM</sup>, Inc c/o Ms. Lynne Areonson Manager of Regulatory Affairs and Quality Assurance 500 S. Arthur Avenue Suite 100 Louieville, CO 80027

Re: K010338

Trade Name: Artic Sun Temperature Management System, Model 200

Regulatory Class: II (two) Product Code: DWJ Dated: February 2, 2001 Received: February, 5, 2001

Dear Ms. Areonson:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for <u>in vitro</u> diagnostic devices), please contact the Office of Compliance at (301) 594-4648. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours

James E. Dillard III

Director

Division of Cardiovascular and

Respiratory Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

## K010333 510(k): Arctic Sun Temperature Management System Device: Indications for Use: The Arctic Sun™ Temperature Management System is a thermal regulating system, indicated for monitoring and controlling patient temperature. (PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED) Concurrence of CDRH, Office of Device Evaluation (ODE) (Division Sign-Off) Division of Cardiovascular, Respiratory, and Neurological Devices 510(k) Number K010338 Over-the-Counter Use\_\_\_ OR Prescription Use (Per 21 CFR 801.109) (Optional Format 1-2-96)

4. STATEMENT OF INDICATIONS FOR USE (FDA FORM)